

MINOR SOURCE OPERATING PERMIT OFFICE OF AIR MANAGEMENT

**Monsanto Company
15849 South U.S. Highway 231
Remington, Indiana 47977**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

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| Operation Permit No.: MSOP 073-11846-00035 | |
| Issued by: Paul Dubenetzky, Branch Chief Office of Air Management | Issuance Date: |

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a hybrid corn seed processing plant.

Authorized Individual: Chad Peters
Source Address: 15849 South U.S. Highway 231, Remington, Indiana 47977
Mailing Address: 15849 South U.S. Highway 231, Remington, Indiana 47977
Phone Number: (219) 261-2122
SIC Code: 0723
County Location: Jasper County)
County Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit
Minor Source, under PSD
Minor Source, Section 112 of the Clean Air Act

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to operate the hybrid corn seed processing plant which has a capacity to process 33,000 pounds of corn per hour (589 bushels per hour). This plant consists of the following equipment:

- (a) Two (2) natural gas-fired grain dryers, identified as Dry 2-A and Dry 2-B. Each dryer has four (4) burners, heat input rate of 60 million British Thermal Units (mmBtu/hr) and drying rate of 20,238 bushels per batch (Bu/batch);
- (b) Two (2) shellers, identified as #3 and #4, each has a capacity of 100,800 pounds per hour (lbs/hr). Particulate matter (PM) emission is controlled by four (4) cyclones, #3A, #3B, #4A, and #4B;
- (c) One (1) ear corn aspirator, identified as #5, with a capacity of 201,600 lbs/hr, and is controlled by cyclone #5A;
- (d) One (1) Foresburg corn grain cleaner, identified as #6, with a capacity of 33,600 lbs/hr, and is controlled cyclone #6A and bagfilter #6B. Air from these control units is exhaust inside the building;
- (e) One (1) sizing machinery, identified as #7, with a capacity of 33,600 lbs/hr, and is controlled by cyclone #7A. The air from this cyclone is exhausted inside the building;
- (f) Two (2) corn grain Duo-aspirators, identified as #8 and #9 each has a capacity of 17,000 lbs/hr. Duo-aspirators #8 is controlled by cyclone #8A, and Duo-aspirator #9 is controlled by cyclone #10A;
- (g) Two (2) gravity tables, identified as #10 and #11, each has a capacity of 14,000 lbs/hr. These tables are controlled by cyclones #9A and #11A;

- (h) One (1) treating/packaging machinery, identified as #12 with a capacity of 33,000 lbs/hr; which is controlled by cyclone #12B, and bagfilter #12A. Air from these control units is exhaust inside the building;
- (i) One (1) rebagging unit identified as #13, which is controlled by cyclone #13; and
- (j) Twenty (20) storage bins, storage bins B1 through B4 has a capacity of 11,000 bushels each; storage bin B5 through B8 has a capacity of 15,000 bushels each; storage bins B9 through B12 has a capacity of 11,000 bushels each; storage bins B13 through B17 has a capacity of 4,600 bushels each; storage bin B18 has a capacity of 1,200 bushels, storage bin B19 has a capacity of 1,500 bushels; and storage bin B20 has a capacity of 250 bushels.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is not required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is **not** a major source, as defined in 326 IAC 2-7-1(22);

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).
- (e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

SECTION C SOURCE OPERATION CONDITIONS

| |
|---------------|
| Entire Source |
|---------------|

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of nitrogen oxide (NO_x) is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAM prior to making the change.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the “authorized individual” as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAM within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee’s right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee’s premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM the fact that continuance of this permit is not consistent with purposes of this article.

C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

Compliance Monitoring Requirements

C.9 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.10 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.11 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;

- (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

Record Keeping and Reporting Requirements

C.12 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.13 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.14 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.15 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) A malfunction as described in 326 IAC 1-6-2; or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.16 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Management stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Management
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015
- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

- (a) Two (2) natural gas-fired grain dryers, identified as Dry 2-A and Dry 2-B. Each dryer has four (4) burners, heat input rate of 60 million British Thermal Units (mmBtu/hr) and drying rate of 20,238 bushels per batch (Bu/batch);
- (b) Two (2) shellers, identified as #3 and #4, each has a capacity of 100,800 pounds per hour (lbs/hr). Particulate matter (PM) emission is controlled by four (4) cyclones, #3A, #3B, #4A, and #4B;
- (c) One (1) ear corn aspirator, identified as #5, with a capacity of 201, 600 lbs/hr, and is controlled by cyclone #5A;
- (d) One (1) Foresburg corn grain cleaner, identified as #6, with a capacity of 33,600 lbs/hr, and is controlled cyclone #6A and bagfilter #6B. Air from these control units is exhaust inside the building;
- (e) One (1) sizing machinery, identified as #7, with a capacity of 33,600 lbs/hr, and is controlled by cyclone #7A. The air from this cyclone is exhausted inside the building;
- (f) Two (2) corn grain Duo-aspirators, identified as #8 and #9 each has a capacity of 17,000 lbs/hr. Duo-aspirators #8 is controlled by cyclone #8A, and Duo-aspirator #9 is controlled by cyclone #10A;
- (g) Two (2) gravity tables, identified as #10 and #11, each has a capacity of 14,000 lbs/hr. These tables are controlled by cyclones #9A and #11A;
- (h) One (1) treating/packaging machinery, identified as #12 with a capacity of 33,000 lbs/hr; which is controlled by cyclone #12B, and bagfilter #12A. Air from these control units is exhaust inside the building;
- (i) One (1) rebagging unit identified as #13, which is controlled by cyclone #13; and
- (j) Twenty (20) storage bins, storage bins B1 through B4 has a capacity of 11,000 bushels each; storage bin B5 through B8 has a capacity of 15,000 bushels each; storage bins B9 through B12 has a capacity of 11,000 bushels each; storage bins B13 through B17 has a capacity of 4,600 bushels each; storage bin B18 has a capacity of 1,200 bushels, storage bin B19 has a capacity of 1,500 bushels; and storage bin B20 has a capacity of 250 bushels.

Emission Limitations and Standards

D.1.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the PM emission limit from the corn processing facilities shall not exceed the following:

| Facility/ Operation | Process Weight Rate (ton/hr) | PM Allowable Emissions (lb/hr) |
|------------------------|------------------------------------|-----------------------------------|
| Ear Corn Dryer #2A | 8.25 | 16.8 |
| Ear Corn Dryer #2B | 8.25 | 16.8 |
| Shelling | 16.5 | 26.8 |

| | | |
|--------------------|------|------|
| Grain Aspirator #5 | 16.5 | 26.8 |
| Grain Cleaning | 16.5 | 26.8 |
| Duo-Aspirator #8 | 8.25 | 16.8 |
| Duo-Aspirator #9 | 8.25 | 16.8 |
| Gravity Table #10 | 7.0 | 15.0 |
| Gravity Table #11 | 7.0 | 15.0 |
| Corn Sizing | 16.5 | 26.8 |
| Rebagging | 16.5 | 26.8 |

The pounds per hour limitation shall be calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for these emissions units and their respective control devices.

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.3 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test these emission units by this permit. However, IDEM may require compliance testing when necessary to determine if these emission units are in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.4 Particulate Matter (PM)

The cyclones and bagfilters shall be in operation at all times whenever the process (corn drying, shelling, aspirator, cleaning and corn sizing), each control device is controlling, is in operation in order to comply with the limit in D.1.1.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.5 Visible Emissions Notations

- (a) Daily visible emission notations of the sheller's #3 and #4 stack exhausts, cyc-3A, cyc-3B, cyc-4A, cyc-4B; aspirator #5 stack exhaust, cyc-5A; Duo aspirators #8 and #9 stacks exhausts; cyc-8A, cyc-10A; gravity table stacks exhausts, cyc-9A, cyc-11A; and rebagging stack exhaust, cyc-13 shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.6 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the corn seed processing operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.1.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.1.8 Cyclone Failure Detection

In the event that bag failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Condition D.1.5, the Permittee shall maintain records of daily visible emission notations of the sheller's #3 and #4 stack exhausts, cyc-3A, cyc-3B, cyc-4A, cyc-4B; aspirator #5 stack exhaust, cyc-5A; Duo aspirators #8 and #9 stacks exhausts, cyc-8A, cyc-10A; gravity table stacks exhausts, cyc-9A, cyc-11A; and rebagging stack exhaust, cyc-13.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain records of the results of the inspections required under Condition D.1.6 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA
SECTION**

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under
326 IAC 2-6.1-5(a)(5).

| | |
|---------------|------------------------------|
| Company Name: | Monsanto Company |
| Address: | 15849 South U.S. Highway 231 |
| City: | Remington |
| Phone #: | (219) 261-3681 |
| MSOP #: | 073-11846-00035 |

I hereby certify that **Monsanto Company** is ☒ still in operation.
☐ no longer in operation.

I hereby certify that **Monsanto Company** is ☒ in compliance with the requirements of **MSOP # 073-11846-00035**.
☐ not in compliance with the requirements of **MSOP #073-11846-00035**.

| |
|---------------------------------------|
| Authorized Individual (typed): |
| Title: |
| Signature: |
| Date: |

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

| |
|-----------------------|
| Noncompliance: |
| |
| |
| |
| |

**Please note - This form should only be used to report malfunctions
applicable to Rule 326 IAC 1-6 and to qualify for
the exemption under 326 IAC 1-6-4.**

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Minor Source Operating Permit

Source Background and Description

Source Name: Monsanto Company
Source Location: 15849 South U.S. Highway 231, Remington, Indiana 47977
County: Jasper
SIC Code: 0723
Operation Permit No.: 073-11846-00035
Permit Reviewer: Aida De Guzman

The Office of Air Management (OAM) has reviewed an application from Monsanto Company relating to the operation of a hybrid corn seed processing plant, which has a capacity to process 33,000 pounds of corn per hour (589 bushels per hour). This plant consists of the following equipment:

- (a) Two (2) natural gas-fired grain dryers, identified as Dry 2-A and Dry 2-B. Each dryer has four (4) burners, heat input rate of 60 million British Thermal Units (mmBtu/hr) and drying rate of 20,238 bushels per batch (Bu/batch);
- (b) Two (2) shellers, identified as #3 and #4, each has a capacity of 100,800 pounds per hour (lbs/hr). Particulate matter (PM) emission is controlled by four (4) cyclones, #3A, #3B, #4A, and #4B;
- (c) One (1) ear corn aspirator, identified as #5, with a capacity of 201,600 lbs/hr, and is controlled by cyclone #5A;
- (d) One (1) Foresburg corn grain cleaner, identified as #6, with a capacity of 33,600 lbs/hr, and is controlled cyclone #6A and bagfilter #6B. Air from these control units is exhausted inside the building;
- (e) One (1) sizing machinery, identified as #7, with a capacity of 33,600 lbs/hr, and is controlled by cyclone #7A. The air from this cyclone is exhausted inside the building;
- (f) Two (2) corn grain Duo-aspirators, identified as #8 and #9 each has a capacity of 17,000 lbs/hr. Duo-aspirators #8 is controlled by cyclone #8A, and Duo-aspirator #9 is controlled by cyclone #10A;
- (g) Two (2) gravity tables, identified as #10 and #11, each has a capacity of 14,000 lbs/hr. These tables are controlled by cyclones #9A and #11A;
- (h) One (1) treating/packaging machinery, identified as #12 with a capacity of 33,000 lbs/hr; which is controlled by cyclone #12B, and bagfilter #12A. Air from these control units is exhausted inside the building;
- (i) One (1) rebagging unit identified as #13, which is controlled by cyclone #13; and

- (j) Twenty (20) storage bins, storage bins B1 through B4 has a capacity of 11,000 bushels each; storage bin B5 through B8 has a capacity of 15,000 bushels each; storage bins B9 through B12 has a capacity of 11,000 bushels each; storage bins B13 through B17 has a capacity of 4,600 bushels each; storage bin B18 has a capacity of 1,200 bushels, storage bin B19 has a capacity of 1,500 bushels; and storage bin B20 has a capacity of 250 bushels.

Stack Summary

| Stack ID | Operation | Height (feet) | Diameter (feet) | Flow Rate (acfm) | Temperature (°F) |
|----------|------------------|---------------|-----------------|------------------|------------------|
| Dry 2A | Corn dryer | 24 | 5' x 5' | 475,500 | 100 |
| Dry 2A | Corn dryer | 24 | 5' x 5' | 475,500 | 100 |
| Cyc-3A | Sheller 3 | 20 | 1.05' x 1.9 | 4,250 | ambient |
| Cyc-3B | Sheller 3 | 20 | 1.05' x 1.9 | 4,250 | ambient |
| Cyc-4A | Sheller 3 | 20 | 1.05' x 1.9 | 4,250 | ambient |
| Cyc-4B | Sheller 3 | 20 | 1.08' x 1.9 | 4,250 | ambient |
| Cyc-5A | Aspirator 3 | 20 | 1.05' x 1.9 | 5,000 | ambient |
| Cyc-7A | Sizing machine | 35'4" | 2.25 | 5,000 | ambient |
| Cyc-8A | Aspirator 8 | 45 | 1.4 x 2.5 | 7,300 | ambient |
| Cyc-10A | Aspirator 9 | 43 | 1.4 x 2.5 | 7,300 | ambient |
| Cyc-9A | Gravity table 10 | 54 | 1.7 x 3 | 14, 500 | ambient |
| Cyc-11A | Gravity table 11 | 54 | 1.7 x 3 | 14,500 | ambient |
| Cyc-13 | Rebagging | 35'6" | 1.25 | 2,100 | ambient |

Recommendation

The staff recommends to the Commissioner that the corn processing operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on February 3, 2000.

The corn seed processing plant is **re-permitted** based on the new permitting rule, 326 IAC 2 that took effect on December 25, 1998.

Emission Calculations

- (a) Natural Gas Combustion Emissions: See page 1 of 1 TSD Appendix A for detailed emission calculations.
- (b) Corn Processing Emissions:
Emission Factors were taken from AP-42, Table 9.9.1-1 & Table 9.9.1-2.

| Facility/ Operation | Throughput (lb/hr) | Emission Factor (lb/ton) | PM Uncontrolled Emissions (tons/yr) | PM10 Uncontrolled Emissions (tons/yr) | PM Controlled Emissions (tons/yr) | PM10 Controlled Emissions (tons/yr) |
|------------------------|--------------------|--|-------------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|
| Ear Corn Dryer #2A | 16,500 | PM = 0.22 lb/ton (SCC 3-02-005-27) PM10 = 25% PM | 7.9 | 1.97 | 7.9 | 1.97 |

| | | | | | | |
|--------------------|--------|--|---------------------------|------|-----------------------------|------|
| Ear Corn Dryer #2B | 16,500 | PM = 0.22 lb/ton (SCC 3-02-005-27) PM10 = 25% PM | 7.9 | 1.97 | 7.9 | 1.97 |
| Shelling | 33,000 | PM10 = 25% PM | 15.6 * 5 cyclones = 78 | 19.5 | 0.95 * 5 cyclones = 4.75 | 1.2 |
| Aspirator # 5 | 33,000 | PM = 0.017 lb/ton PM10 = 25% PM | 1.22 | 0.31 | 0.07 | 0.02 |
| Cleaning | 33,000 | PM = 0.075 lb/ton (SCC3-02-005-03) PM10 = 25% PM | 5.4 | 1.35 | 0.34 | 0.1 |
| Duo Aspirator #8 | 16,500 | PM = 0.017 lb/ton PM10 = 25% PM | 0.6 | 0.15 | 0.04 | 0.01 |
| Duo Aspirator #9 | 16,500 | PM = 0.017 lb/ton PM10 = 25% PM | 0.6 | 0.15 | 0.04 | 0.01 |
| Gravity Table #10 | 14,000 | PM = 0.017 lb/ton PM10 = 25% PM | 0.52 | 0.13 | 0.03 | 0.01 |
| Gravity Table #11 | 14,000 | PM = 0.017 lb/ton PM10 = 25% PM | 0.52 | 0.13 | 0.03 | 0.01 |
| Corn Sizing | 33,000 | PM10 = 25% PM | 6.1 | 1.5 | 0.37 | 0.1 |
| Rebagging | 33,000 | PM10 = 25% PM | 0.1 | 0.02 | 0.01 | 0.0 |
| TOTAL EMISSIONS | | | 108.86 | 27.2 | 21.48 | 5.42 |

Methodology :

PM Emissions = Throughput, lb/hr * ton/2000 lb * Ef, lb/ton * ton/2000 lb * 8760 hr/yr

PM10 Emissions = 25% (PM Emissions)

Shelling PM Emissions = Cyc-3A, 3B, 4A, 4B, 5A air flow rate, cuft/min * cyclone grain loading, gr/cuft * 60 min/hr * 8760 hr/yr * lb/7000 gr * ton/2000 lb

Sizing PM Emissions = Cyc-7A air flow rate, cuft/min * cyclone grain loading, gr/cuft * 60 min/hr * 8760 hr/yr * lb/7000 gr * ton/2000 lb

Rebagging PM Emissions = Cyc #13 air flow rate, cu ft * cyclone grain loading, gr/cuft * 60 min/hr * 8760 hr/yr * lb/7000 gr * ton/2000 lb

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

| Pollutant | Potential To Emit (tons/year) |
|-----------------|-------------------------------|
| PM | 109.9 |
| PM-10 | 31.18 |
| SO ₂ | 0.4 |
| VOC | 2.8 |
| CO | 44.2 |
| NO _x | 52.6 |

Justification for the Level of Approval

The source is being re-permitted pursuant to 326 IAC 2-6.1, Minor Source Operating Permit since it emits PM, PM10 or NOx at a rate of 25 tons per year or greater but less than the 100 tons per year threshold for Part 70 permit (Note: PM10 is the pollutant considered for Part 70).

Actual Emissions

No previous emission data has been received from the source.

Limited/Controlled Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

| | Limited Potential to Emit (tons/year) | | | | | | |
|------------------------|--|-------|-----------------|-----|------|-----------------|------|
| Process/facility | PM | PM-10 | SO ₂ | VOC | CO | NO _x | HAPs |
| Natural Gas Combustion | 1.0 | 4.0 | 0.4 | 2.8 | 44.2 | 52.6 | 0.0 |
| Corn Processing | 21.48 | 5.42 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Emissions | 22.48 | 9.42 | 0.4 | 2.8 | 44.2 | 52.6 | 0.0 |

County Attainment Status

The source is located in Jasper County.

| Pollutant | Status (attainment, maintenance attainment, or unclassifiable; severe, moderate, or marginal nonattainment) |
|-----------------|---|
| PM-10 | attainment |
| SO ₂ | attainment |
| NO ₂ | attainment |
| Ozone | attainment |
| CO | attainment |
| Lead | Not Determined |

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Jasper County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Jasper County has been classified as attainment or unclassifiable for all the other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

The whole source is **re-permitted** based on the new permitting rule, 326 IAC 2, approved on December 25, 1998. The source PSD Definition determined in this permit (emissions after controls):

| Pollutant | Emissions (ton/yr) |
|------------------|-----------------------|
| PM | 22.48 |
| PM10 | 9.42 |
| SO ₂ | 0.4 |
| VOC | 2.8 |
| CO | 44.2 |
| NO _x | 52.6 |
| Single HAP | 0.0 |
| Combination HAPs | 0.0 |

- (a) This re-permitted source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

- (a) 326 IAC 2-7 (Part 70 Permit Program)
This **re-permitted** source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:
- (1) each criteria pollutant is less than 100 tons per year,
 - (2) no single hazardous air pollutant (HAP) is emitted nor combined HAPs is emitted.

Federal Rule Applicability

- (a) New Source Performance Standards (NSPS):
- (1) 40 CFR Part 60.300, Subpart DD- Standards of Performance for Grain Elevators.

This rule applies to grain terminal elevators, or any grain storage elevator, with a permanent storage capacity of 2.5 million bushels, and any storage elevators located at any wheat flour mill, wet corn mill, dry corn mill, or soybean oil extraction plant which has a permanent grain storage capacity of 1 million bushels.

This rule is **not** applicable to Monsanto Company, because the source is not a wheat flour mill, a wet corn mill, a dry corn mill, nor a soybean oil extraction plant.
 - (2) There are no other New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) National Emission Standards for Hazardous Air Pollutants (NESHAPs):
There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

- (a) 326 IAC 2-6 (Emission Reporting)
This source is **not** subject to 326 IAC 2-6 (Emission Reporting), because it has no potential to emit more than one hundred (100) tons per year of CO, VOC, NOx, PM10 or SO2.
- (b) 326 IAC 5-1 (Visible Emissions Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:
 - (1) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

- (a) 326 IAC 8 (Volatile Organic Sources)
There are no provisions in 326 IAC 8 that applies to this source, because it is not a source of volatile organic compounds (VOC).
- (b) 326 IAC 6-3-2 (Process Operations)
This rule mandates a PM emissions for the following process using the equation in the rule:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

| Facility/ Operation | Process Weight Rate (ton/hr) | PM Allowable Emissions (lb/hr) |
|------------------------|---------------------------------|-----------------------------------|
| Ear Corn Dryer #2A | 8.25 | 16.8 |
| Ear Corn Dryer #2B | 8.25 | 16.8 |
| Shelling | 16.5 | 26.8 |
| Grain Aspirator #5 | 16.5 | 26.8 |
| Grain Cleaning | 16.5 | 26.8 |
| Duo-Aspirator #8 | 8.25 | 16.8 |
| Duo-Aspirator #9 | 8.25 | 16.8 |
| Corn Sizing | 16.5 | 26.8 |
| Gravity Table #10 | 7.0 | 15 |

| | | |
|-------------------|------|------|
| Gravity Table #11 | 7.0 | 15 |
| Rebagging | 16.5 | 26.8 |

The cyclones and bagfilters shall be in operation at all times whenever the process (corn drying, shelling, aspirator, cleaning and corn sizing) each control equipment is controlling is in operation, in order to comply with this limit.

- (c) 326 IAC 6-4-1 (Fugitive Dust Emissions)
This rule applies to all sources of fugitive dust. The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

None of the listed air toxics will be emitted from this source.

Conclusion

The operation of this corn seed processing plant shall be subject to the conditions of the attached proposed **Minor Source Operating Permit 073-11846-00035**.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler**

Page 1 of 1 TSD App A

2 dryers @ 60 mmBtu/hr

Company Nai Monsanto Company
Address City 15849 S. US Highway 231, Remington, IN 47977
MSOP: 073-11846-00035
Reviewer: Aida De Guzman
Date: 02/13/00

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

| |
|----|
| 60 |
| 60 |

| |
|-------|
| 525.6 |
| 525.6 |

| Pollutant | | | | | | |
|-------------------------------------|------------|------------|------------|----------------------|------------|-------------|
| Emission Factor in lb/MMCF | PM* | PM10* | SO2 | NOx | VOC | CO |
| | 1.9 | 7.6 | 0.6 | 100.0 **see below | 5.5 | 84.0 |
| PTE (tons/yr) 1 @ 60 mmBtu/hr Dryer | 0.5 | 2.0 | 0.2 | 26.3 | 1.4 | 22.1 |
| PTE (tons/yr) 1 @ 60 mmBtu/hr Dryer | 0.5 | 2.0 | 0.2 | 26.3 | 1.4 | 22.1 |
| TOTAL PTE (tons/yr) | 1.0 | 4.0 | 0.4 | 52.6 | 2.8 | 44.2 |

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
above
emission

See page 2 for HAPs emissions calculations.